In the Claims:

- 1. (Currently amended): A method for transferring the local delivery of a nucleic acid into to the nerve cells, comprising a step of contacting the nerve cells with either (a) a negative-sense RNA viral vector or (b) cells comprising said vector, wherein said negative-sense RNA virus belongs to the Paramyxoviridae family.
- 2. (Original): A method of claim 1, wherein said nerve cells are the central nervous system cells.
- 3. (Original): A method of claim 2, wherein said central nervous system cells are ventricular ependymal cells.
- 4. (Original): A method of claim 2, wherein said central nervous system cells are hippocampus cells.
- 5. (Previously amended): The method of claim 1, wherein nucleic acid contained in the negative-sense RNA viral vector comprises a foreign gene.
- 6. (Original): The method of claim 5, further comprising allowing to transiently express said foreign gene.
- 7. (Cancelled)
- 8. (Currently amended): A method of claim 7 5, wherein said protein acts on the hypothalamic nuclei.
- 9. (Currently amended): A method of claim 7 5, wherein said protein is capable of protecting the brain from ischemia.
- 10. (Original): A method of claim 5, wherein said foreign gene is selected from the group consisting of FGF-1, FGF-5, NGF, CNTF, BDNF, GDNF, p35, CrmA, ILP, bc1-2 and ORF 150.
- 11. (Withdrawn)
- 12. (Withdrawn)
- 13. (Cancelled)
- 14. (Currently Amended): A method of claim 13 1, wherein said virus belonging to the Paramyxoviridae family is Sendai virus.

- 15. (Currently Amended): A negative-sense RNA viral vector used for transferring the local delivery of a nucleic acid into to the nerve cells by the method of claim 1.
- 16. (New): The method of claim 1, wherein said local delivery is achieved through intraventricular administration.
- 17. (New): The method of claim 1, wherein said local delivery is achieved through administration to brain parenchyma.
- 18. (New): The method of claim 5, wherein said foreign protein gene encodes a protein regulating food intake.